



RTU Course "Workshop on Applied Computer Science"

12306 Lietišķo datorzinātņu katedra

General data

Code	DPI402
Course title	Workshop on Applied Computer Science
Course status in the programme	Compulsory/Courses of Limited Choice
Course level	Post-graduate Studies
Course type	Academic
Field of study	Computer Science
Responsible instructor	Asņina Ērika
Volume of the course: parts and credits points	2 parts, 4.0 Credit Points, 6.0 ECTS credits
Language of instruction	LV, EN, RU
Possibility of distance learning	Not planned
Abstract	This course is intended to develop students' skills in reading and understanding scientific publications in foreign languages. The course considers guidelines and recommendations of prominent scientists on writing scientific papers and reports in the Latvian and foreign languages. Students are enabled to improve their knowledge about approaches of scientific paper writing and to master skills in scientific debates.
Goals and objectives of the course in terms of competences and skills	The goal is to integrate students' knowledge about realization of research with scientific community requirements for exposition of research results in papers, reports and books. Student skills in analytical overview of high-quality scientific publications are improved. Student competence in identification of trustworthy and untrustworthy sources, written and oral presentation and critical assessment of research results is raised.
Structure and tasks of independent studies	Independent studies include practical application of theoretical knowledge about preparation, assessment, public presentation and discussion of scientific publications.
Recommended literature	<ol style="list-style-type: none"> 1. "IEEE Transactions on Software Engineering" sākot no 1994. gada. 2. "IEEE Software" sākot no 1994. gada. 3. ECOOP (European Conference on Object-Oriented Programming) konferences rakstu krājumi 1998-2001 (cietā veidā) un s1987-2001 (e-resursu veidā – www.ecoop.org). 4. OMG grupas tehnoloģijas programmatūras izstrādei, www.omg.org 5. ACM/IEEE International Conference on Model Driven Engineering Languages and Systems (MODELS) rakstu krājumi sākot no 1998. gada 6. Jaunākie avoti par aktuālām problēmām no Internet tīkla, RTU zinātniskās bibliotēkas aktuālie e-resursi.
Course prerequisites	Principles of performing research at Bachelor's study level

Course outline

Theme	Hours
Introduction to applied computer science	2
Determination of topical software development techniques	6
Trustworthy and untrustworthy scientific sources, systems of bibliographical descriptions of scientific sources	2
Ways of analysis of scientific sources	2
Structure and contents of scientific papers, reports, and books	8
Assessment of scientific papers and reports	6
Oral presentation of scientific papers and reports	4
Forms of scientific debates in academic and conference workshops	2
Development of scientific research and presentation of its main results	32

Learning outcomes and assessment

Learning outcomes	Assessment methods
Is able to determine trustworthy scientific sources	Positively assessed paper or report
Is able to formulate a research goal and tasks, substantiate the choice of research techniques, describe the process of research and its results	Positively assessed paper or report
Is able to assess written presentation of scientific research	Positively assessed student's review of a paper or report
Is able to describe the process of research and research results orally	Positively assessed presentation of a paper or report
Is able to take part in scientific debates, i.e., to ask questions and to give well-grounded answers	Positively assessed presentation of a paper or report
Is able to formulate and apply in practice the principles of performing and presenting research	Passed exam

Study subject structure

Part	CP	ECTS	Hours per Week			Tests		
			Lectures	Practical	Lab.	Test	Exam	Work
1.	2.0	3.0	1.0	1.0	0.0		*	
2.	2.0	3.0	1.0	1.0	0.0		*	